

FINDING OF NO SIGNIFICANT IMPACT
Environmental Assessment to Address Deteriorating Ranger Stations
LeConte, Rae Lakes, and Crabtree
Sequoia and Kings Canyon National Parks, California
May 2010

This finding of no significant impact (FONSI), environmental assessment (EA), and wilderness minimum requirements analysis constitutes the record of the environmental impact analysis and decision-making process for this project. The National Park Service (NPS) will implement alternative 3, the management preferred alternative as described in the EA to Address Deteriorating Wilderness Ranger Stations at LeConte, Rae Lakes, and Crabtree, which is the replacement of the three ranger stations with new structures.

PURPOSE AND NEED FOR FEDERAL ACTION

The Crabtree, Rae Lakes, and LeConte ranger stations are located on the John Muir/Pacific Crest National Scenic Trail, the most heavily used wilderness trail in Sequoia and Kings Canyon National Parks. Each year, tens of thousands of backpackers and stock users travel all or part of this trail. Wilderness rangers operating from these stations carry out daily hikes of their patrol area, and monitor and rehabilitate wilderness resources during the three or more months they are stationed there. On average, rangers at each station contact, educate, and assist 2,000 to 4,000 visitors per year, and parkwide, conduct 50 to 100 search and rescue (SAR) operations and perform more than 100 medical assists for visitors in the wilderness. In addition, under a cooperative agreement, the Crabtree station is used for winter snow surveys by the California Department of Water Resources (DWR) under its Cooperative Snow Surveys program.

The purpose of this project is to continue to meet the parks' wilderness stewardship mandate by protecting park resources and by providing appropriate visitor services in wilderness. The parks' 2007 *Final General Management Plan and Final Environmental Impact Statement* (FGMP) provides direction for desired conditions and appropriate facilities in wilderness. Per the FGMP, within the wilderness, efforts will be made to preserve a sense of remoteness and freedom from human-caused impacts. However, simple amenities such as ranger stations may be present to support administrative activities, reduce or control resource impacts, or provide for research and monitoring. Facilities used to support the administration and protection of wilderness, including wilderness ranger stations, may be provided. In accordance with the FGMP, there is a need to assess the existing wilderness ranger stations and determine if they would be removed, replaced, or rehabilitated. The EA provides that evaluation and includes the minimum requirement / minimum tool analysis in accordance with NPS *Management Policies 2006*, *Director's Order 41* and *Reference Manual RM 41: Wilderness Preservation and Management*.

The *Wilderness Act of 1964* (16 U.S.C. 1131–1136; P.L. 88-577), NPS wilderness policies, and the parks' *Sequoia and Kings Canyon National Parks: Backcountry Management Plan* (BMP) (1986) all state that structures may be allowed in wilderness

where such structures “enhance enjoyment and protect the wilderness resource.” It is also the responsibility of the NPS to ensure that the structures are not a major intrusion on the wilderness experience of visitors.

The objective of this project is to effectively provide for wilderness stewardship, visitor education, and emergency services in the LeConte, Rae Lakes, and Crabtree areas while furthering wilderness goals and minimizing impacts on the parks’ natural and cultural resources and wilderness values. Under an agreement with the California DWR, the parks must also continue to provide a safe and accessible station at Crabtree for winter snow surveyors. Specifically, the project objectives for this project include:

- Supporting the wilderness stewardship mandate

- Supporting visitor health and safety

- Supporting employee health and safety

- Supporting appropriate visitor services (education, information, emergency services)

- Protecting area water quality

- Preventing wildlife from obtaining human food

RANGE OF ALTERNATIVES CONSIDERED

The EA analyzes four alternatives, including the no-action alternative (alternative 1); alternative 2 - deferred maintenance on existing stations at and Rae Lakes and Crabtree stations, with no maintenance at LeConte; alternative 3 - replace existing stations with new ranger stations; and alternative 4 - dismantle and remove the ranger stations. The FONSI does not incorporate changes based on what was analyzed in the EA as the preferred alternative. There are no changes based on public comments or other agency consultations.

SELECTED ALTERNATIVE

The preferred alternative, Alternative 3- Replace Ranger Stations with New Structures is the selected alternative. Alternative 3 will involve constructing new stations in accordance with the parks’ *Architectural Character Guidelines* for rustic structures in a wilderness location. The stations will be engineered for the environmental conditions and snow loads of the sites.

The new stations will be designed to approximately fit the footprint of the existing ranger stations. The existing station at Crabtree is slightly larger than the other stations to accommodate snow survey personnel in the winter. The Crabtree station will still remain within the same approximate footprint as the old station.

The stations will be designed to effectively accomplish the goal of providing for wilderness stewardship actions, safe and efficient structures for ranger living quarters, food and supply storage, visitor services, and emergency operations. Due to the limited work windows (due to weather conditions), it is expected that each station will take 1 year to complete, starting the preliminary work in the fall and completing the work in the following summer.

Subsequent to approval, for Rae Lakes and LeConte ranger stations, the structures will be made of logs with exterior dimensions of approximately 13 × 17 feet, with the roof peaking about 18 feet above the ground. The replacement for Crabtree will be approximately 14 × 22 feet, which is no larger than the current footprint. All materials will be selected in consultation with the parks' architectural committee. Design will adopt rustic architecture and use natural non-reflective textures and materials and traditional window design. The stations will reflect traditional station architecture expected in a mountainous wilderness setting. The station logs will be cut to size by a company specializing in log station design and building. The logs will come from sources outside the parks; no wood material will come from the parks' wilderness. All materials will be chosen for their ability to blend into a wilderness setting and efficiently serve their purpose.

During removal and construction, the area ranger will operate out of a tent on the site. Visitor services and patrols will continue. The ranger will still be available to visitors at the same marked location of the ranger station. Temporary storage boxes will be supplied for secure food and equipment storage for the ranger and work crew. The boxes will be removed at the end of the construction phase.

Under the selected alternative, the existing station at LeConte will be demolished and removed. The site will be restored to a natural setting. The new station will be constructed at a location approximately 100 feet to the south. The site proposed for new construction is also within the area of the potentially significant archeological resources. However, it is an area where the lithic scatter is much less dense than in the existing ranger station area. After an analysis of the entire patrol area, the interdisciplinary team identified this location as the best possible location with the lowest potential environmental effects.

Construction sequence and loads for LeConte will be the same as for the Rae Lakes and Crabtree ranger stations. The park archeologist has determined that the existing LeConte Ranger Station site is a significant prehistoric cultural site. Building on that site will cause unacceptable environmental impacts on park resources; therefore, the following mitigation was developed to prevent unacceptable impacts:

The new station will be placed on a location 100 feet south of the existing station.

The former station site, surrounding grounds, and access trail will be rehabilitated to a natural state.

A small archeological field crew will be used to complete a data recovery effort at the station site prior to construction and rehabilitation.

An archeologist will be on site during all construction activities where ground disturbance occurs.

The park archeologist will identify paths to minimize disturbance to archeological resources. Crews will be instructed to remain within these paths while working.

Approximately 150 feet of new access trail to the new station will be built.

Much of the prefabrication for the stations will be done in the frontcountry, leaving only assembly of components in the wilderness. Construction needs and materials will not be significantly different for any of the stations. However, the removal of the Rae Lakes station will require less material to be removed because of the nature of the structure (tent frame as opposed to building).

Specific site conditions will dictate how much digging, fill material and concrete will be necessary, but the differences will be no more than a cubic yard or two of fill. The following describes the work sequence, materials and tools needed, and equipment and resupply requirements for each station.

Work Sequence (for LeConte, Rae Lakes, and Crabtree stations)

Mobilize work crews and deliver supplies and equipment.

Demolish existing station.

Excavate approximately 12–15 cubic yards of material for foundation/foundation wall trench.

Pack and fly in materials for foundation, log shell, and framing.

Pack and fly out debris as backhaul.

Pour foundation.

Erect new station shell.

Fly in furnishings and install.

Demobilize work crews and remove supplies and excess materials.

Materials and Tools Needed per Ranger Station

Foundation:

Approximately 10,000–20,000 pounds of concrete and mortar (final needs vary by site and will not be known until foundation excavations are completed).

Building shell and furnishings per ranger station:

Approximately 30,000 pounds of logs, lumber, and large tools.

Equipment and tools:

Minimum Tool Considerations

Construction will require transport of materials (tools, equipment, building material, and removed construction debris) in and out of the job site. Support of the construction crew will also require transport of food and gear to and from the construction site. Transport of food, equipment, and material will be done by packstock and/or helicopter. The type of transport is guided by NPS *Director's Order 41* (NPS 1999) and *Sequoia and Kings Canyon National Parks' Management Directive 49* (NPS 2009).

As defined in *Director's Order 41* (NPS 1999), section C.2: "Minimum Tool means a use or activity, determined to be necessary to accomplish an essential task, which makes use of the least intrusive tool, equipment, device, force, regulation, or practice that will achieve the wilderness management objective. This is not necessarily the same as the term "primitive tool," which refers to the actual equipment or methods that make use of the simplest available technology (i.e., hand tools)."

The 2009 *Sequoia and Kings Canyon National Parks Management Directive 49* (NPS 2009) defines the minimum tool as "the management method (tool) that causes the least amount of impact to the physical resources and experiential qualities (character) of wilderness." Stock is generally the preferred method of supporting field crews in the park wilderness areas. Helicopter support is used (1) to transport equipment that is too fragile for other methods; (2) to transport samples and other cargo which are time-dependent, require stable conditions, or are of large volume or weight; (3) where stock are not allowed or would be unduly damaging to resources; or (4) in areas that are inaccessible to stock.

Stock will be the transport method used to support this project except when one of the following conditions applies:

Equipment is fragile.

Cargo is time-dependent or requires stable conditions.

Cargo is large, typically over 8 feet in any one dimension, which will include most logs or large lumber and very bulky items.

An individual piece of cargo weighs over 250 pounds. This will include items such as building logs and possibly some construction equipment.

Stock is not allowed in the area or the area is otherwise inaccessible to stock.

Stock would create unacceptable environmental impacts and it is impractical to reschedule stock use for a less damaging time.

Use of stock would cause more environmental impact than a helicopter.

Environmental hazards to personnel or animals (e.g., snow or high water crossings) create unsafe conditions for stock use and transport of the material cannot wait until conditions improve.

Whenever any one of those conditions applies, flying a helicopter may be utilized as the minimum tool for transportation of heavy and bulky equipment and supplies.

No more than 50 helicopter flight per station, based on a Type 3 (light) helicopter. The project flights will occur in early summer and late summer/early fall and will be done within 2-week operational periods. The helicopter will be based at Cedar Grove for the Rae Lakes and LeConte ranger stations, and approximately 28 hours of flight time will be needed for the Rae Lakes operation and 31 hours of flight time for LeConte. The base of operations for Crabtree will be at Horseshoe Meadows east of the park, and approximately 35 hours of flight time will be necessary for project work.

3.5 kW generator (ultra-quiet, “inverter” type), electric cement mixer, small chainsaw, electric air compressor to run power nailers and roofing staplers.

Handheld power tools (electric circular saws, pneumatic nailers, chainsaw, cordless drills).

Handheld non-power tools.

Equipment Resupply

Between 900 and 1,200 pounds of material will be transported by stock to the project site at the start of the project. This will require approximately three pack trains (a maximum of 21 stock total). Approximately 200 pounds per week will be transported to the project site by stock for the duration of the project. Three pack trains with six to eight head of stock per train will be used for the resupply operations. Stock will deliver supplies to the site on a rotating basis, staging out of meadows en route. Demobilization is expected to take eight mule loads. Temporary holding corrals or other means will be used to confine the stock at durable locations. In addition, stock will be fed with supplemental feed and will not be permitted to graze in area meadows.

Crew size and duration on site

Site visit with construction supervisor and helper—2 days on site. Main construction crew—six to eight crew members, 7 to 9 weeks on site (1 week to set up, demolition, and prep; 1 week to dig foundation; 1 week to pour; 4 weeks to construct, furnish, and clean up—extra time allotted for contingencies).

Camp location

Crew will camp within 1/4 mile of the site at an existing and previously impacted camp. The camp will be screened from the main trail and more than 100 feet from water. All minimum impact and "Leave No Trace" guidance and considerations will be followed.

ALTERNATIVES CONSIDERED IN THE ENVIRONMENTAL ASSESSMENT

In addition to the selected alternative, the EA analyzed three alternatives. Under the no-action alternative (alternative 1), the park would keep the existing ranger stations and perform frequent maintenance depending on age and initial design of the station. No construction work would occur under this alternative. Over the long term, maintenance would continue as necessary. However, it is likely that at least one of these stations (Rae Lakes) would have to be abandoned in the short term due to safety issues, and the other two stations would not be sustainable over the long term.

Under alternative 2, the parks would perform deferred maintenance and improve the existing stations at Rae Lakes and Crabtree Meadows. However, no improvements would be made to the LeConte Station due to sensitive resources in the area.

Under alternative 4, the ranger stations would be dismantled and removed and the sites would be restored. Patrol rangers and other park staff would no longer have access to and use of these administrative facilities in the wilderness.

ALTERNATIVES CONSIDERED BUT DISMISSED FROM CONSIDERATION

Relocating the Rae Lakes Ranger Station 150 Feet Uphill

A location about 150 feet upslope from the current ranger station site was carefully examined for suitability as a station site. It is a mostly flat site with good access to water. Although there is some sign of previous human activity there, the site does not show significant evidence of recent human disturbance. According to the parks' plant ecologist, the temporary camp is substantially recovered from the human disturbance it seems to have received more than 70 years ago. This site was considered due to its operational advantages over the existing site, including easier access for stock, better access to water, and more space available for emergency operations. It was determined that those advantages do not outweigh the additional environmental impacts that would occur as a result of moving the station to a new location. Therefore, this alternative was dismissed from further consideration.

Replacing Stations with Yurts

Yurts are commercially made tent-like structures made of canvas that fit over a metal or wooden frame. They are set up on a wooden platform. They are able to support minor snow loads (under a foot) and would be structurally adequate for use as a ranger station from June through mid-October. In the winter, the canvas/tent is removed from the platform, reducing visual intrusion on wilderness. In winter, there is no evidence of a station at all. In 1999, a yurt was built to replace a canvas and wood tent-frame construction at Little Five Lakes Ranger Station.

The proposal to replace any or all of the ranger stations under consideration with yurts was dismissed for a number of reasons. The useful lifespan of a yurt in summer at project site altitudes is about 15 years; the costs are excessive for the relatively short time it would be usable. Associated costs for a new or rehabilitated natural log structure are only slightly more than for a yurt. The life span of the log structure is 40 – 50 years. In addition, although some may consider yurts more aesthetically pleasing than canvas tents, yurts do not comply with the parks' *Architectural Character Guidelines* for rustic structures. They do not use traditional materials in construction, and their shape and color generally do not blend with forest and granite surroundings as well as natural log construction does. Yurts would not be available to snow survey and ranger personnel on winter patrols or SARs because they are not able to withstand heavy snow loads and are removed in the winter. Finally, yurts do not provide an adequate barrier to entry by bears, other wildlife, or people. For these reasons, yurts were dismissed from consideration as an alternative replacement station for the wilderness ranger stations.

Rebuilding the Stations with Only Native Materials

Park staff considered using native materials from the project area to construct the ranger stations. Field reviews determined that there are not enough suitable trees and rocks on site to meet needs. There would be increased impacts on natural resources if native materials were used for project work. Park staff considered using trees from other areas of the park for the construction of the structures. This would involve cutting trees from within the park and/or using hazard trees, transporting them (by helicopter or truck) to a milling location to make them suitable for use in construction, then transporting them by helicopter to the project sites. Again, using park materials could result in an unacceptable number of cut trees and adverse impacts on natural resources. In addition, there would be a longer time required on site for project work—to find, cut, prepare, and custom fit the materials to construct the structures. This would involve additional disturbance to park visitors and wilderness resources due to the presence of work crews for extended periods of time. Finally, some materials would still have to be brought into the project sites, including concrete for the foundations, materials to furnish the station, and internal fixtures. Therefore, this alternative was not considered feasible and was dismissed from further evaluation.

Rebuilding the Stations using Only Non-mechanized Tools and Equipment

It is not possible to transport all supplies solely by stock due to the weight and bulk of some materials. Some helicopter use is required. In addition, through the minimum requirement / minimum tool analysis process, the park determined that limited use of mechanized tools was necessary to meet project objectives and to construct a sustainable ranger station. Though some construction could occur in the frontcountry areas of the park, including cutting and drilling on the structure, there would be some work that would be necessary on site, such as preparing the cement for the foundation wall, which requires a cement mixer, and final fitting of the logs, which would require minimal use of motorized hand drills, power nailers, staplers, and a compressor. Also, a chainsaw would be needed when it is impractical for safety to use a hand saw, such as for larger-diameter trees (8–12 inches diameter at breast height [dbh]) and for additional notching that may be required on the logs for final fitting. Therefore, it was determined that minimal

mechanized tools and equipment would be needed to meet project objectives and this alternative was ruled out from further analysis.

Using a Medium or Heavy Lift Helicopter to Reduce Number of Flights

The helicopter normally based at Sequoia and Kings Canyon National Parks is classified as a light helicopter (Type 3). As such, it is limited to loads of about 600 pounds per flight. A medium helicopter (Type 2) can carry loads of about 1,800 pounds per flight. A heavy lift helicopter (Type 1) can carry upwards of 2,000 pounds per flight. The ability to carry heavier loads per flight would result in fewer flights per project. The use of a medium or heavy lift helicopter was evaluated but rejected as a feasible alternative. These types of helicopters would have to be specifically requested and contracted. During the summer and fall seasons, availability would be an issue due to priority work on fires. Logistically, it would be more difficult to stage, fuel, and support a heavy lift helicopter. In addition, the costs associated with a heavy lift helicopter increase the overall costs of the project exponentially (more than \$250,000 for helicopter use per site). Therefore, this alternative was ruled out.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The CEQ defines the environmentally preferred alternative as “the alternative that will promote the national environmental policy as expressed in the National Environmental Policy Act (NEPA) § 101.”

[Section 101 states that] it is the continuing responsibility of the Federal Government to:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
- Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The identification of the environmentally preferred alternative was based on an analysis that balances factors such as physical impacts on various aspects of the environment, mitigation measures to deal with impacts, and other factors, including the statutory mission of the NPS and the purposes for the project.

Alternative 1, No Action, is not the environmentally preferred alternative for the following reasons: (1) it would continue to demand patrol ranger time for structural fixes, which would mean less time for improved wilderness stewardship, visitor education, and emergency services in the LeConte, Rae Lakes, and Crabtree areas; (2) the deteriorating structures would continue to have adverse impacts on the parks' natural and cultural resources and wilderness values; (3) the stations would continue to be inadequate for ranger operations; (4) safety hazards to personnel under winter conditions would continue to be a problem; (5) the structures would continue to deteriorate until they were unusable and would continue to impact wilderness surroundings; and (6) the structures would continue to be out of compliance with the *Architectural Character Guidelines* for rustic structures in wilderness. Thus, alternative 1 would not meet any of the six goals under NEPA section 101.

Alternative 2, Repair the Existing Stations, is not the environmentally preferred alternative for the following reasons: (1) while it would improve the condition of two of the ranger stations, it would not provide optimal wilderness stewardship, visitor education, and emergency services capabilities; (2) the alternative would result in improved facilities but would not provide fully safe, structurally sound, and aesthetically pleasing ranger stations; and (3) there would continue to be impacts on cultural resources from the presence of a ranger station at the LeConte site. Therefore, NEPA goals 2, 3, and 4 would not be met under this alternative.

Alternative 4, Remove the Stations and Rehabilitate the Sites, would remove structures from the wilderness and may be considered the most aesthetically pleasing alternative and the alternative that would achieve the restoration of naturalness to the wilderness setting at these locations; however, is not considered the environmentally preferred alternative because (1) it would limit the time wilderness rangers spend in the wilderness, limiting wilderness stewardship, resource protection, restoration, and monitoring activities, and visitor services; (2) it would limit visitor accessibility to the patrol rangers in times of emergency; and (3) it could allow the degradation of wilderness and the environment by non-compliant wilderness users due to increased absence of patrol rangers able to take education and correctional actions, and (4) greater periods when there is less immediacy of response to critical incidents. Thus, this alternative would not fully meet the six goals under NEPA section 101.

Alternative 3, Replace Ranger Stations with New Structures, is the environmentally preferred alternative because (1) it would enhance wilderness opportunities for a variety of users, as on-site rangers would be able to more effectively meet wilderness stewardship and resource-protection mandates by providing visitor education, emergency services, and resource monitoring; (2) it would provide aesthetically pleasing stations constructed from renewable materials that meet the parks' *Architectural Character Guidelines*; (3) it would reduce safety hazards to personnel and cooperators; and (4) it would create sustainable and appropriate structures that would protect park wildlife and preserve park values and resources for future generations. This alternative surpasses the other alternatives in realizing the full range of national environmental policy goals as stated in section 101 of NEPA.

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

The following summary reviews impact considerations and highlights key safeguards of implementing the selected alternative. Mitigation measures will be employed to minimize these impacts during and after completion of the proposed project. The EA provides for detailed consideration of the factors supporting the determination of non-significance.

Vegetation: The selected alternative will result in short- and long-term adverse effects on vegetation at the project sites from trampling and increased stock use, and the potential for the introduction of non-native plant species. Disturbance of native vegetation at the LeConte site would occur from relocating the station and trail, resulting in the permanent removal of 705 sq ft of vegetation. Restoration of the former LeConte site will offset this new disturbance and result in beneficial effects on vegetation. Vegetation is expected to recover at Crabtree and Rae Lakes in the construction zone within a year or two after project completion.

The selected alternative may affect the abundance or distribution of individual plants in a localized area, but will not affect the viability of local or regional populations or communities. Overall, this alternative will result in negligible to minor adverse effects on vegetation at the project sites, and no cumulative effects, therefore there will not be any significant effect on the human environment.

Wildlife: Continued use of the ranger stations will result in long-term minor adverse effects on wildlife. Wildlife, such as bears, could be protected by the rehabilitation of the stations at LeConte, Rae Lakes, and Crabtree because they no longer will have access to human food, resulting in long-term beneficial effects. There will be no cumulative effects on wildlife. Because this alternative will result in long-term minor adverse effects and long-term beneficial effects, there will be no significant effects on the human environment.

Special Status Species: The selected alternative will result in localized short-term minor adverse effects from construction activities, long-term beneficial effects resulting from less maintenance at the Rae Lakes site, and a determination under the ESA (Section 7) of *may affect, but not likely to adversely affect*. There will be no effect on critical habitat. There will be no cumulative effects. Because the effects will be localized, short-term, and minor, there will be no significant effects on the human environment.

Water Quality: This alternative will result in localized long-term beneficial effects from improved gray-water disposal practices, and continued localized long-term negligible to minor adverse effects from human waste management. This alternative would not measurably contribute to adverse cumulative effects. Because this alternative will result in long-term beneficial effects and minor effects from human waste management, there will be no significant effects on the human environment.

Wilderness Values and Wilderness Operations: Under the selected alternative, there will be helicopter and stock use to replace the ranger stations at LeConte, Rae Lakes, and

Crabtree. This work will result in readily apparent human-caused impacts in limited areas of the wilderness, and will have a minor to moderate short-term adverse effect on wilderness character during the project duration, and minor to moderate long-term adverse effects on wilderness character from the continued presence of structures in wilderness. This alternative will contribute to the overall moderate adverse cumulative effects from ongoing park activities and existing structures in wilderness.

Compared to the no-action alternative, there will be fewer repairs (and correspondingly less disturbance) needed on the three ranger stations and more time devoted to wilderness administration and protection. Such actions will have a long-term and beneficial effect on the parks' ability to carry out their mandate for wilderness stewardship.

The NPS considered all potential trade-offs in replacing these long-established facilities, or not, and determined that the long-term benefits of improving the wilderness ranger stations will outweigh the short-term transitory effects of installation and the effect of continued presence of structures within the park wilderness. Continuing with the parks' traditional approach of placing patrol rangers at strategically located ranger stations facilitates the parks' capability to adequately manage the area as Wilderness (the detailed minimum requirement analysis is documented in the EA).

Cultural Resources (LeConte only): Removing the ranger station and public use from the cultural site at LeConte would result in long-term beneficial effects. In the short term, during project work, this alternative would result in minor adverse effects. The NHPA section 106 determination would be *no adverse effect*. There will be no cumulative effects and no significant effects to the human environment.

Scenic Resources: There would be minimal change to the existing scenic resources from the improvement to the aesthetic qualities of the three ranger stations. Ranger stations would continue to be present at LeConte, Rae Lakes, and Crabtree, resulting in long-term minor to moderate adverse effects on scenic resources. The continued existence of the wilderness ranger stations will not result in significant effects to the human environment.

Soundscapes: There are short-term adverse moderate impacts due to construction noise and helicopter flights in the project area; natural sounds would continue to prevail throughout most of the parks' wilderness area. Because the impacts would be minor and short term, there will be no significant effect on the human environment.

Visitor Experience and Recreational Opportunities: The selected alternative will result in short-term moderate adverse effects on visitor experience and recreation during the rehabilitation project work at LeConte, Rae Lakes, and Crabtree ranger stations. In the long term, after the new stations are completed normal patrol functions will resume, resulting in increased contact with visitors, improved resource protection, and an overall minor long-term beneficial effect on visitor experience and recreation. There will be no cumulative effects and no significant effect on the human environment.

Health and Safety: Under this alternative, the safety of park personnel will be improved throughout the year due to improved conditions at the ranger stations. Overall, this alternative will result in long-term beneficial effects on the health and safety of park personnel and the public due to increased patrol times and education, and no significant effect on the human environment.

BASIS FOR DECISION

Alternative 3, the preferred alternative as described in this document, is the selected course of action. The selected alternative best fulfills the purpose of the project and meets the objectives. The selected alternative can be implemented without any major adverse impacts to vegetation, wildlife, special status species, water quality, wilderness values and wilderness operations, scenic resources, natural soundscapes, cultural resources, visitor experience and recreational opportunities, and health and safety.

This alternative is replacing existing structures that have traditionally served the purpose of administering the wilderness within Sequoia and Kings Canyon National Parks. The new structures will be more in line with the parks' Architectural Guidelines and will be more rustic in appearance, serving to reduce the adverse visual effects created by the existing structures.

There were no highly controversial effects identified during either the preparation of the environmental assessment or the public review period, and the impact analysis has not been highly debated. The nature of this project is such that it does not involve highly uncertain, unique, or unknown risks. The available information on which to base this decision is adequate.

The selected actions are not directly related to any larger proposal. The project does not establish a precedent or constrain any future considerations of use in the area. The NPS followed required compliance processes to ensure that this project does not violate any federal, state, or local environmental protection laws or requirements.

The selected alternative also best meets the criteria in Section 101 of the National Environmental Policy Act for the environmentally preferred alternative; and, after consideration of effects described in the environmental assessment, there are no significant impacts on the human environment as defined by criteria in 40 CFR 1508.27.

MITIGATION MEASURES

Mitigation measures have been incorporated into the selected alternative to avoid or reduce impacts as part of the proposed project.

Stock-Use Considerations and Mitigation

The presence of stock is recognized as a traditional wilderness use. Stock has long been used to transport personnel and material to remote wilderness areas in Sequoia and Kings Canyon National Parks. When stock are used, while not in immediate use they are usually tied in one area during the day and then turned loose at night to graze the surrounding

meadows and other vegetation. When stock are tied or confined to one area, their hooves disturb the ground, eroding the surface or sometimes exposing tree roots.

Standard mitigation practice is to choose a site at least 100 feet from water, on ground with minimal vegetation, and that avoids terrain where tree roots might become exposed by trampling. A line is strung between trees about 50 feet apart and stock is tied along the line. Additional mitigation for this project will include placing temporary hitch rails to remove stock lines from trees or constructing temporary enclosures to spread out stock use over a wider area.

Supplemental stock feed will be used and will be carried in by mules. Feed will be weed free. Before leaving, packers will rake and scatter manure and clean up all loose feed so it will not be available to wildlife.

Under the direction of the parks' plant ecologist, meadows will be monitored by the area ranger to make sure that unacceptable environmental impacts on meadows are not occurring as a result of grazing (removal of biomass) or mechanical impacts on meadow sod or stream banks. Where established criteria show that unacceptable environmental impacts are occurring or will soon occur, the area is limited or closed to stock.

Sequoia and Kings Canyon National Parks' packstock operations are subject to the same minimum impact standards and grazing regulations as general park users. In addition, for each station, the parks' plant ecologist or their designee will survey the areas where stock would travel or be held and write a site-specific grazing plan for construction operations. The site-specific grazing plan will outline mitigation measures and best management practices to be used to reduce environmental impacts as a result of stock use.

All crew supplies will be carried in and taken out by packstock. Where possible, materials will also be transported by stock. However, if stock is not the selected method of transport for any of the reasons detailed above, then helicopters will be used to transport materials.

Helicopter Transport Considerations and Mitigation

The helicopter normally based at Sequoia and Kings Canyon National Parks is classified as a light helicopter (Type 3). It is limited to loads of about 600 to 800 pounds per flight.

Mitigation measures for helicopter use will include:

Helicopter use will be guided by minimum tool determinations and best management practices. Use will be limited to the absolute minimum necessary to bring in and carry out material and debris that is too large for packstock to carry or when packstock are determined to be inappropriate based on the previous guidance.

Weather permitting, delivery flights will be scheduled before and/or after the peak visitation periods of July and August.

Flights will occur only between 8:00 a.m. and 5:00 p.m. and will follow flight paths to and from the project sites designed to avoid sensitive and highly pristine areas, as determined by the wilderness coordinator (Figure 6).

Park staff will inform hikers of possible noise intrusions, when they will occur, and alternative routes or times visitors can use to avoid the noise. Park staff will inform visitors camping near the construction and landing areas of flights and construction activities.

Rae Lakes bighorn sheep use areas: The parks' wildlife biologist will provide a map of known bighorn sheep areas, and the helicopter will avoid flying above or landing in those areas; the final approach to the landing zone will stay below the area of the historic sightings. Flights will be suspended if sheep are observed within 1/2 mile of the construction area. The landing zone for the helicopter will be located approximately 500 feet from an area where sheep have been observed.

Additional mitigation measures are included in Table 1.

Table 1. Mitigation Matrix

Resource Area	Mitigation	Responsible Party
Work Crews	The maintenance supervisors and crew leaders will select a previously impacted site for project base camps.	SEKI Maintenance Project Leader
	All crews will be instructed in and expected to use "Leave No Trace" and minimum impact camping practices.	
	Approved food-storage boxes will be provided for the construction areas and crew camps.	
	Crew camps will be located at previously impacted areas with minimum potential to disrupt wildlife habitat or habits.	
	Crews will be instructed on proper food-storage practices and camps will be inspected to make sure food is properly stored.	
	Water for the work crews both on site and in camp will be taken from a river or stream that will only be accessed by established paths. Use "scrim" at water collection and in camp to reduce compaction and trampling impacts. Sensitive areas in both the work site and crew camp areas will be flagged or marked and crews will be instructed to avoid them.	
	Gray water will be disposed of over 100 feet from any surface water and will be poured into a rock-lined pit screened to	

Resource Area	Mitigation	Responsible Party
	<p>prevent rodents or birds from accessing it.</p> <p>Special containers, which will be packed out to a sewage treatment facility, will be used for toilets.</p> <p>No motorized equipment will be used in camp. A propane/white gas or battery-powered lantern will be used to light the cooking area inside the cook tent. All other light will be from personal flashlights and headlamps.</p> <p>Supervisors will ensure that group noise levels do not disturb nearby campers.</p>	
Construction Timing and Techniques	<p>Depending on snow, construction will begin in July and be finished by mid-August. If weather is a factor, construction on a station may be split into two seasons to reduce work during peak visitation times.</p> <p>Construction activities will be planned to minimize or eliminate any procedure that might displace normal visitor access or impact on their wilderness experience.</p> <p>Construction will be done only between 8:00 a.m. and 5:00 p.m.</p> <p>During construction periods, wilderness visitors will be informed of construction activities. This will occur through the permit issuance process, wilderness rangers on the trail, and other educational contacts. Where possible, visitors will be told of alternative routes and times to avoid these noise intrusions.</p> <p>Construction and staging areas will be identified and limited to previously impacted areas. Workers will be instructed to confine activity to those defined areas.</p> <p>Construction debris removed (e.g., demolition debris from old station, excess mixed cement, sawdust and chips from treated wood, packaging materials) will be disposed of at appropriate areas outside the parks or stockpiled at approved locations within the parks (outside of wilderness) to be used in future projects.</p> <p>The material removed as a result of digging a foundation trench is expected to be no more than 15 cubic yards for any of the proposed stations. Excess fill will be distributed evenly to blend into the natural downwash of the slope or used nearby as trail fill if appropriate and needed.</p>	SEKI Maintenance Project Leader

Resource Area	Mitigation	Responsible Party
	<p>Concrete and mortar will be mixed by electric mixer at least 100 feet from surface water. Tools and equipment will be cleaned away from surface water. Excess construction water will be disposed of inside the foundation wall.</p> <p>Standard erosion-control measures such as silt fences and/or sandbags will be used to minimize any potential soil erosion.</p> <p>All disturbed areas will be restored as nearly as possible to pre-construction conditions shortly after construction activities are completed.</p> <p>Any cut trees will be flush cut and camouflaged to reduce visibility.</p> <p>All gas-powered tools will be inspected for leaks (fuel, oil, hydraulic fluid, etc.) and all necessary repairs will be made before the commencement of work.</p> <p>Unless unacceptable impacts are found to occur as a result (as is the case with LeConte), the new stations will be placed in the same footprint and impact zone as the previous stations.</p> <p>Where possible, building design will take advantage of naturally occurring site conditions, such as sunlight, shade, ventilation, views, drainage, and existing vegetation. Products used will not be rare or endangered. Where possible, recycled products will be used. Nontoxic products will be used and design will strive for a high level of energy efficiency.</p> <p>Sustainable design principles will be used that meet all applicable Uniform Building Codes, National Fire Protection Association codes, and Occupational Safety and Health Administration requirements.</p> <p>The proposed buildings and structures will comply with applicable regulations concerning fire safety and lighting. The new stations will use all-natural log siding and materials to comply with the parks' <i>Architectural Character Guidelines</i> for rustic structures.</p> <p>Stations will be aesthetically matched with the surrounding environment and will generally not be visible from normal visitor-use corridors.</p> <p>All log materials from off site used in construction will be</p>	

Resource Area	Mitigation	Responsible Party
	<p>inspected by park staff for insect pests, pathogens, or disease prior to staging for delivery to the wilderness construction site to mitigate introduction of non-native organisms. Logs will be cleaned for pathogen and noxious weed control. Prior to wilderness delivery, the logs will be stored on asphalt and covered whenever possible and the storage site(s) will be recorded and monitored for 1 to 3 years after the logs are removed to check for non-native species.</p> <p>Where bedrock or boulders prevent digging, holes will be drilled in the rock with a gas-powered drill and anchors inserted for the foundation. Cement walls will be faced with native rock mortared into place. Stone from excavation will be reused in wall facings where available.</p> <p>Excess materials from station repair or removal will be cut up for complete removal to a disposal site or, where possible, a materials recycling facility.</p> <p>The logs used for the structure will be flown in several at a time, depending on the lifting capacity of the helicopter. Depending on site constraints, materials may have to be staged up to 150 feet from the work site and a high line rigged to take logs and other heavy material to the construction site. If this is done, the trees used to anchor the high line will be padded to protect the bark.</p> <p>All lumber and logs for the project will be pre-cut and drilled in the frontcountry for later assembly on site. However, some use of hand power drills, a generator, pneumatic nailers, and chainsaws will be necessary for final fitting.</p>	
<i>Vegetation</i>	<p>Incidental native vegetation threatened with disturbance from construction will be removed from project areas for later reuse during restoration activities. Herbaceous perennials will be transplanted before trenching for the foundation.</p> <p>If a species of concern is found during the final survey, appropriate mitigation measures will be taken, which could include transplanting the vegetation, collecting seed, or flagging areas to protect the species from construction activities.</p> <p>Construction materials will be inspected for soil and plant parts. Dirty materials will be cleaned by pressure washing or other means. Construction materials that could acquire seeds from surrounding areas will be covered.</p>	SEKI Maintenance Project Leader and SEKI Vegetation Specialist

Resource Area	Mitigation	Responsible Party
	<p>In the frontcountry, construction materials will be staged and sling-loaded from asphalt, rather than on vegetated edges of helispots, whenever possible.</p> <p>A list and/or map of staging areas will be maintained so that sites can subsequently be surveyed for invasive non-native plants. All staging and construction sites will be surveyed for invasive non-native plants 1 to 3 years after project completion.</p> <p>Construction crews will inspect their shoes, clothing, and equipment for seeds and soil before leaving the frontcountry. Seeds and soil will be removed and placed in bagged garbage.</p> <p>Packstock (fur and hooves) and equipment will be inspected and cleaned of seeds and dirt, as necessary, before leaving the frontcountry.</p> <p>Weed-free cubes, grain, pellets, or weed-free hay will be fed to stock at frontcountry pack stations.</p>	
<i>Sierra Nevada Bighorn Sheep</i>	<p>The methods used will minimize the noise of construction activities.</p> <p>The methods used will minimize the duration of the construction activities.</p> <p>The methods used will minimize the footprint of the project.</p> <p>Potential foraging habitat of the bighorn (areas of short hair sedge) will be avoided to the maximum extent possible</p> <p>Helicopters will not fly over bighorn sheep habitat.</p>	SEKI Maintenance Project Lead and Helicopter Manager
<i>Water Quality</i>	<p>Construction and materials will be located at least 100 feet from open water to reduce the likelihood of construction-related debris or sediment entering surface water.</p> <p>Storing of hazardous materials and fueling of all power tools will be restricted to park-approved equipment staging areas.</p> <p>Spilled hazardous materials will be cleaned up immediately and will not be allowed to seep into the soil or reach open water sources.</p> <p>Dirty construction water will be poured inside the foundation</p>	SEKI Maintenance Project Leader

Resource Area	Mitigation	Responsible Party
	<p>wall of the station at least 100 feet from surface water.</p> <p>Sawdust and chips from treated wood will be packed out as trash and most of the cutting and drilling will be done in the frontcountry before lumber is brought in.</p> <p>Construction crews will use appropriate methods for human waste treatment (e.g., pit toilet or “Johnny-pot” for removal).</p>	
Soundscapes	<p>To minimize visitors’ exposure to unnatural sounds, construction will occur only from 8:00 a.m. to 5:00 p.m. and may be delayed until visitors leave their camps in the morning. Visitors camping in the area will be contacted before motorized tools are turned on in the morning.</p> <p>An ultra-quiet generator will be used and turned off when it is not in use. To reduce the need for power tools on site, most of the cutting and drilling of the structure will be done in the frontcountry prior to transport to the project sites. On-site use of power tools will be kept to a minimum and used only where hand tools cannot achieve the same result in a minimum amount of time.</p>	SEKI Maintenance Project Leader
Cultural Resources	<p>Maintenance supervisors will instruct work crews of penalties for illegally collecting artifacts or intentionally damaging any archeological or historic property. Construction workers and supervisors will be advised of the laws and guidelines and special sensitivity to ensure protection of cultural resources.</p> <p>Should any unknown cultural resources be encountered during construction at any of the three ranger station locations all ground disturbance will be immediately stopped. The parks’ archeologist or a qualified representative will examine the area as soon as possible and will follow the requirements of the <i>National Historic Preservation Act</i> (NHPA), and any other applicable cultural resource laws, as needed.</p> <p>Any level of repair conducted at the LeConte site will comply with the following mitigations:</p> <p style="padding-left: 40px;">All current impacts (e.g., pathways, firewood piles, stock use) will be kept to existing areas.</p> <p style="padding-left: 40px;">No digging or ground disturbance will occur within a 100-foot radius of the existing station; the parks’ archeologist will be consulted if any other ground disturbance is proposed.</p>	SEKI Cultural Resources Specialist and Maintenance Project Leader

Resource Area	Mitigation	Responsible Party
	<p>Employees assigned to the station will receive a briefing from the parks' archeologist regarding the known limits of the site, the need to prevent impacts on the site, and the associated cultural resource management regulations.</p> <p>Paths will be identified and marked by the parks' archeologist to minimize disturbance to archeological resources. Patrol rangers and work crews will be instructed to remain within these paths while working.</p> <p>In the event that previously unknown cultural resources are encountered, a qualified archeologist will be contacted immediately for advice.</p> <p>Archeological excavation of the archeological site will occur prior to any ground-disturbing activities.</p> <p>All ground-disturbing activities associated with demolition of the existing station, restoration of the existing site, and construction of the new station will be monitored by the parks' archeologist.</p> <p>For the LeConte Ranger Station project, in addition to the above mitigation measures, a memorandum of agreement (MOA) will be established between the parks and the SHPO. The MOA will establish a data recovery plan in consultation with SHPO, and both must be in place prior to implementing the project. The data recovery plan will include the following:</p> <p style="padding-left: 40px;">Archeological excavation of the prehistoric archeological site will occur prior to any other ground-disturbing activities.</p> <p style="padding-left: 40px;">All ground-disturbing activities associated with demolition of the existing station, restoration of the existing site, and construction of the new station will be monitored by the parks' archeologist.</p> <p style="padding-left: 40px;">Costs for documentation and curation of any artifacts recovered must be included.</p> <p>Proper supervision of construction and compliance with mitigation measures established per this FONSI require that the parks' maintenance supervisor, archeologist, and the plant ecologist or their designees visit the sites during construction.</p>	

PUBLIC ENGAGEMENT AND AGENCY COORDINATION

Public Scoping

A letter and press release initiating public scoping and describing the project were issued on February 22, 2006. The press release was sent to approximately 50 media outlets, interest groups, public officials, agencies, and individuals on the parks' mailing list. Interagency scoping was also conducted and included agencies such as the U.S. Fish and Wildlife Service (USFWS), California State Department of Fish and Game (CDFG), California State Historic Preservation Office (SHPO), and the California DWR.

The park received five comments during the 30-day public scoping period, which ended March 24, 2006. All were generally in support of the project. In addition, from 2005 to 2008, park staff discussed the project with several representatives from interest groups at various events to obtain their opinion on the project. While some organizations have philosophical differences with the necessity of having ranger stations and structures in wilderness, some representatives stated that they understood the structures' value to improve the parks' ability to provide effective wilderness preservation and management.

In addition, Wilderness Watch forwarded the collected comments from an Internet discussion forum after the topic of the wilderness ranger stations was introduced on their website. Some respondents expressed concern about structures in wilderness, while others recognized the need, citing the importance of the ranger stations in SAR operations and protecting wilderness resources. In addition, from 2005 to 2008, park staff discussed the project with several representatives from interest groups at various events to gain additional information on the project. While some organizations have philosophical issues with having ranger stations and structures in wilderness, some representatives stated that they generally understood the structures' value in improving the parks' ability to provide effective wilderness preservation and management.

Public Review of the EA

The EA was released on March 15, 2010 (an extended 47-day opportunity for public review was provided due to the length of time between scoping and preparation and release of the EA).

A press release was sent to approximately 50 media outlets. The printed EA was sent to 80 individuals, park neighbors, organizations, area tribes, local news media, area libraries, and agencies on the park's mailing list; 20 CD versions were also distributed. Printed copies of the EA were available at several area libraries, including Tulare County libraries (Exeter Branch and Lindsay Branch), the Tulare County Law Library, and Fresno County libraries (Central, Sunnyside, Fowler, Kingsburg, Orange Cove, Parlier, Reedley, Sanger and, Selma). Notification of the availability of the EA was sent to an additional 74 individuals on the park's mailing list, and emailed to nearly 400 interested parties. An electronic version of the EA was broadly available to the public through a posting on the NPS Planning, Environment and Public Comment (PEPC) website and linked to the parks' public website.

The notice for the review of the EA was published in the Three Rivers Kaweah Commonwealth on March 26 and on the Commonwealth and Fresno Bee's website on March 26 and March 19 respectively. Information on the EA was also posted on the National Parks Travelers Website on March 22. In addition, the press release was sent to 780 followers through Twitter.

In addition to the public notices, park employees made several presentations at area venues on park planning and projects which included information on the Wilderness Ranger Station EA. A public engagement workshop was conducted on February 23 in Three Rivers, California, and more than 40 people attended. A presentation was given in Bishop, California on March 30 (8 attendees) and information on the EA was made available at Lone Pine during an open house on March 31 (20 attendees).

The public review and comment period for the EA was open until April 30, 2010. The park received six comments during the public review period of the EA; four from individuals, one from an interest group (Backcountry Horsemen of California, High Sierra Unit), and one from a business (Rainbow Pack Station).

All of the commenters generally supported the existence of ranger stations for the administration of wilderness and the need for the project. All were in full or partial support of the management preferred alternative. One individual had concerns related to the use of motorized equipment in wilderness and recommended minimizing this use. The same individual wanted to ensure that the relocation of LeConte would not affect archeological resources, and questioned the evaluation of park operations related to the ranger patrol function. The Backcountry Horsemen of California recommended that the Rae Lakes Ranger Station be the top priority for replacement (which it is) and to use stock whenever possible for the transportation of materials, though they supported helicopter use when stock use was not feasible. They also questioned the historical significance of the LeConte station at its current location.

These specific types of comments were not brought forward during public scoping, but were considered in the EA. Regarding the historic resources in the area, the LeConte station is not historic nor is it eligible for listing on the National Register of Historic Places. Actually, the station is located on a known prehistoric archeological site, and moving the station would serve to protect this site, resulting in a long-term beneficial effect to cultural resources. The LeConte Ranger Station was visited by a park archeologist in the summer of 2006 who confirmed the presence of a prehistoric site in the immediate area around the current station. Additionally, two shovel test pits (STPs) were excavated at the locations of alternative 2 and 3, respectively. The data recovered from test pits showed the location of alternative 3 (the selected alternative) to be outside the known boundaries of the prehistoric site. Therefore, the relocation site in alternative 3 is far enough away from the prehistoric site to protect the site.

Regarding the Wilderness Act requirements and the use of the minimum tool, Section 4(c) of the Wilderness Act provides for both absolute and general prohibitions in wilderness areas. The actions discussed in this analysis are general prohibitions. The NPS

and other wilderness land management agencies are authorized to determine whether or not a general prohibition (in this case the landing of aircraft, structures or installations, and the use of motorized equipment) is “necessary to meet minimum requirements for the administration of the area for the purpose of this Act.”

The Minimum Requirement/Minimum Tool (MRMT) evaluation has determined that the ranger stations are necessary to meet the minimum requirement for administering the Sequoia-Kings Canyon Wilderness. In addition, the minimum tool for the replacement of the ranger stations, as analyzed in the EA and MRMT, was determined to be a combination of helicopters for transporting materials too large for stock, stock for transporting supplies, hiking in by employees, and onsite materials including a combination of hand tools and limited use of mechanized/ motorized equipment to complete the construction of the ranger stations. Stock use will be the primary transport except where determined unsafe or infeasible. Also, non motorized tools will be used primarily, with only occasional use of motorized equipment for the construction of the stations. Consideration of the minimum tool was also given to limit the time of the construction, in accordance with the mitigation measures provided by the USFWS for the protection of Sierra Nevada bighorn sheep.

The EA detailed the environmental consequences that would occur to park operations, including the wilderness ranger patrol function, should the stations be completely removed. Currently, rangers are in the wilderness at or near their station for the entire visitor season. They have all their food and supplies and generally do not leave even for days off. Each station’s patrol area is about 50 to 80 square miles of rugged terrain and the ranger is responsible for patrolling not only the 30 to 70 miles of maintained trails, but cross-country routes as well. The presence of rangers would be greatly reduced in the wilderness without ranger stations. The patrol function for wilderness rangers would likely be modified from its current function to mirror other National Park System wilderness units, where rangers hike in for 8 to 10 day patrols, and then hike out for their off duty periods. This means that rangers in these remote areas could spend 1-2 days hiking in to their patrol areas, and 1-2 days hiking out of their patrol areas, and would spend lieu days outside of wilderness. This would result in about half as much patrol time per summer season per ranger as with the ranger stations. Rangers’ patrol areas would also be reduced, as they would be unable to travel as far without a base to leave supplies and food because they would be carrying fully loaded backpacks.

Regarding the priorities for the replacement of the ranger stations, Rae Lakes and Crabtree ranger stations are the top priorities for replacement.

The commenters did not provide any additional, new, or substantive information that will require revising the EA for additional public review or that will change the determination of effects.

Consultation and Coordination

A letter was sent to the California State Historic Preservation Officer (SHPO) on July 30, 2008 concerning this project. The SHPO had no concerns with either the Rae Lakes and

Crabtree Ranger stations since they are not National Register eligible under the standard criteria (36 CFR 60.4(g)). Since the LeConte station is located on a historic site, SHPO and the NPS agreed that a memorandum of agreement (MOA) will be established between the NPS and the SHPO to establish a data recovery plan for the project (Personal communication, T. Burge). The data recovery plan will include the following:

- Archeological excavation of the potentially significant archeological site will occur prior to any ground-disturbing activities.
- All ground-disturbing activities associated with demolition of the existing station, restoration of the existing site, and construction of the new station will be monitored by the parks' archeologist.

Informal consultation in accordance with the Endangered Species Act Section 7 was initiated in an April 7, 2006 letter to the U.S. Fish and Wildlife Service (USFWS) to request concurrence that the proposed project would not likely adversely affect Sierra Nevada bighorn sheep (*Ovis Canadensis californiana*) and the bald eagle (*Haliaeetus leucocephalus*) which may occur near the project area. In a May 17, 2006 letter, the USFWS concurred with the not likely to adversely affect determinations and recommended mitigation measures which have been incorporated into the project plans.

NON-IMPAIRMENT OF PARK RESOURCES

Impairment is an impact that, in the professional judgment of the responsible manager, will cause permanent and/or major harm to the integrity of park resources or values, including opportunities that otherwise will be present for the enjoyment of those resources or values.

The implementation of the preferred alternative will result in no more than minor to moderate adverse impacts to vegetation, wildlife, special status species, water quality, wilderness resources and wilderness operations, scenic resources, natural soundscapes, cultural resources, health and safety, visitor experience and recreational opportunities in and around the project area. Mitigation implemented during and after project implementation will reduce impacts to vegetation, wildlife, special status species, water quality, wilderness values, scenic resources, soundscapes, cultural resources, visitor experience, and health and safety.

The NPS has determined that implementation of the proposed action will not constitute an impairment to Sequoia and Kings Canyon National Parks' resources and values. This conclusion is based on a thorough analysis of the environmental impacts described in the EA, public comments received, relevant studies, and professional judgment of the decision-makers guided by direction in NPS *Management Policies 2006*.

UNACCEPTABLE IMPACTS

The impact threshold at which impairment occurs is not always readily apparent. Therefore, the NPS applies a standard that offers greater assurance that impairment will not occur. The NPS does this by avoiding impacts that it determines to be unacceptable. These are impacts that fall short of impairment, but are still not acceptable within a

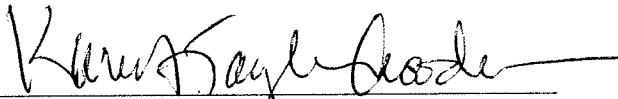
particular park's environment. The NPS has determined that the preferred alternative will not result in unacceptable impacts to Sequoia and Kings Canyon National Parks' resources. This conclusion is based on a thorough analysis of the environmental impacts described in the EA, public comments received, relevant studies, and professional judgment of the decision-makers guided by direction in NPS *Management Policies 2006*.

CONCLUSION

Based on the conservation planning and environmental impact analysis documented in the EA, with due consideration of the nature of the public comments and consultations with other agencies, and given the capability of the mitigation measures to avoid, reduce, or eliminate impacts, the NPS has determined that selected actions do not constitute a federal action that normally requires preparation of an environmental impact statement (EIS). The selected actions will not have a significant effect on the quality of the human environment or the park's cultural resources, or natural resources, and are not likely to adversely affect threatened or endangered species.

There are no unmitigated adverse impacts on public safety, sites, or districts listed in, or eligible for listing in, the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law. Based on the foregoing, it has been determined that an EIS will not be prepared and the selected actions may be implemented as soon as practicable.

Recommended:

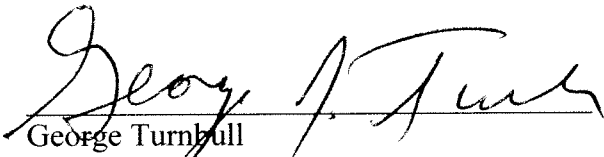


Karen F. Taylor-Goodrich
Superintendent, Sequoia and Kings Canyon National Parks

05/18/10

Date

Approved:



George Turnbull
Acting Regional Director, Pacific West Region

5/25/10
Date